the journal of steroid biochemistry

editors-in-chief

J. R. PASQUALINI and R. SCHOLLER

Volume Contents,
Subject and Author Index (January–June 1987)

Volume 26
1987

Pergamon Press

Oxford New York Beijing Frankfurt São Paulo Sydney Tokyo Toronto

S.B. 26/6—H

EDITORS-IN-CHIEF

J. R. PASQUALINI and R. SCHOLLER,
Foundation for Hormone Research,
26 Boulevard Brune, 75014-Paris, France

ASSOCIATE EDITORS

H. ADLERCREUTZ, Helsinki, Finland
J. CRABBÉ, Brussels, Belgium
E. GURPIDE, New York, U.S.A.
E. V. JENSEN, Zurich, Switzerland
A. E. KELLIE, London, England
L. MARTINI, Milan, Italy
A. MUNCK, Hanover, NH, U.S.A.
B. W. O'MALLEY, Houston, TX, U.S.A.
D. O. TOFT, Rochester, U.S.A.

CORRESPONDING EDITORS

A. AAKVAAG, Bergen, Norway
S. ANANCHENKO, Moscow, U.S.S.R.
F. AURICCHIO, Naples, Italy
P. L. BALLARD, San Francisco, U.S.A.
M. BEATO, Marburg/Lahn, F.R.G.
P. A. BELL, East Hanover, U.S.A.
E. W. BERGINK, Oss, The Netherlands
J. BLAQUIER, Buenos Aires, Argentina
R. BOUILLON, Leuven, Belgium
S. BOURGEOIS, San Diego, U.S.A.
A. BRODIE, Baltimore, U.S.A.
K. J. CATT, Bethesda, U.S.A.
L. CEDARD, Paris, France
J. A. CIDLOWSKI, Chapel Hill, U.S.A.
J. H. CLARK, Houston, U.S.A.
G. DAXENBICHLER, Innsbruck, Austria
E. R. DESOMBRE, Chicago, U.S.A.
M. L. DUFAU, Bethesda, U.S.A.
H. A. ERIKSSON, Stockholm, Sweden
J. FISHMAN, New York, U.S.A.
K. FOTHERBY, London, England
J. W. FUNDER, Melbourne, Australia
G. GREENE, Chicago, U.S.A.
K. GRIFFITHS, Cardiff, Wales
B. GRONER, Bern, Switzerland
J. Å. GUSTAFSSON, Stockholm, Sweden
V. HANSSON, Oslo, Norway
K. B. HORWITZ, Denver, U.S.A.
I. HUHTANIEMI, Helsinki, Finland
D. R. IDLER, Newfoundland, Canada
V. H. T. JAMES, London, England
J. KATO, Yamanashi-ken, Japan
B. S. KATZENELLENBOGEN, Urbana, U.S.A.
A. M. KAYE, Rehovot, Israel
R. J. B. KING, London, England
F. LABRIE, Quebec, Canada
C. P. LANTOS, Buenos Aires, Argentina
S. LIAO, Chicago, U.S.A.
M. E. LIPPMAN, Bethesda, U.S.A.
P. C. MACDONALD, Dallas, U.S.A.
B. S. MCEWEN, New York, U.S.A.
W. L. MCGUIRE, San Antonio, U.S.A.
E. MENINI, Rome, Italy
E. MILGROM, Le Kremlin-Bicêtre, France
W. R. MILLER, Edinburgh, Scotland
T. MULDOON, Augusta, U.S.A.
J. MÜLLER, Zurich, Switzerland
B. E. P. MURPHY, Montreal, Canada
M. NEVES-E-CASTRO, Lisbon, Portugal
M. I. NEW, New York, U.S.A.
A. W. NORMAN, Riverside, U.S.A.
H. OKADA, Kyoto, Japan
M. J. PARKER, London, England
G. PÉREZ-PALACIOS, Mexico City, Mexico
W. B. PRATT, Ann Arbor, U.S.A.
J. P. RAYNAUD, Paris, France
G. ROUSSEAU, Brussels, Belgium
W. T. SCHRADER, Houston, U.S.A.
K. SCHUBERT, Jena, G.D.R.
M. SERIO, Florence, Italy
J. SJÖVALL, Stockholm, Sweden
A. SPÄT, Budapest, Hungary
L. STÁRKA, Prague, Czechoslovakia
C. SUMIDA, Paris, France
J. R. TATA, London, England
W. TAYLOR, Newcastle-upon-Tyne, England
P. TUOHIMAA, Tampere, Finland
S. ULICK, New York, U.S.A.
G. VERHOEVEN, Leuven, Belgium
A. VERMEULEN, Ghent, Belgium
R. VIHKO, Oulu, Finland
C. A. VILLEE, Boston, U.S.A.
K. D. VOIGT, Hamburg, F.R.G.
C. R. WIRA, Hanover, U.S.A.

Publishing Office
Journals Production Unit, Pergamon Journals Ltd, Hennock Road, Marsh Barton, Exeter, Devon EX2 8NE, England
(*Tel.* Exeter (0392) 51558; *Telex* 42749)

Subscription and Advertising Offices
North America: Pergamon Journals Inc., Maxwell House, Fairview Park, Elmsford, NY 10523, U.S.A.
Rest of the World: Pergamon Journals Ltd, Headington Hill Hall, Oxford OX3 0BW, England
(*Tel.* Oxford (0865) 64881)

Subscription per annum (1987), *including postage and insurance. Annual institutional subscription rate* (1987) DM 1735.00; *2-year institutional rate* (1987/88) DM 3296.50; *personal subscription rate for those whose library subscribes at the regular rate* (1987) DM 214. *Payments to be made in advance. Prices are subject to amendment without notice.*

Microform Subscriptions and Back Issues: Back issues of all previously published volumes are available in the regular editions and on microfilm and microfiche. Current subscriptions are available on microfiche simultaneously with the paper edition and on microfilm on completion of the annual index at the end of the subscription year.

Published monthly

Copyright © 1987 Pergamon Journals Limited

It is a condition of publication that manuscripts submitted to this journal have not been published and will not be simultaneously submitted or published elsewhere. By submitting a manuscript, the authors agree that the copyright for their article is transferred to the publisher if and when the article is accepted for publication. However, assignment of copyright is not required from authors who work for organizations which do not permit such assignment. The copyright covers the exclusive rights to reproduce and distribute the article, including reprints, photographic reproductions, microform or any other reproductions of similar nature and translations. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, electrostatic, magnetic tape, mechanical, photocopying, recording or otherwise, without permission in writing from the copyright holder.

Photocopying information for users in the U.S.A.
The Item-fee Code for this publication indicates that authorization to photocopy items for internal or personal use is granted by the copyright holder for libraries and other users registered with the Copyright Clearance Center (CCC) Transactional Reporting Service provided the stated fee for copying, beyond that permitted by Section 107 or 108 of the U.S. Copyright Law, is paid. The appropriate remittance of $3.00 per copy per article is paid directly to the Copyright Clearance Center Inc., 27 Congress Street, Salem, MA 01970, U.S.A.

Permission for other use
The copyright owner's consent does not extend to copying for general distribution, for promotion, for creating new works or for resale. Specific written permission must be obtained from the publisher for such copying.

The Item-fee Code for this publication is: 0022-4731/87 $3.00 + 0.00

LIST OF CONTENTS

JANUARY

Editorial Addresses	i	
Steroid Nomenclature	v	
R. Sridaran	1	Ovarian steroid production in rats treated with gonadotropin-releasing hormone during early pregnancy
S. Gyorki, R. James, G. L. Warne, B. A. K. Khalid, K. N. Wynne and J. W. Funder	7	Genital fibroblasts from normal individuals and patients with androgen insensitivity: demonstration of reduced or absent levels of a specific protein ($M_r \sim 41K$, $pI \sim 6$) in receptor negative cells
Mark E. Costlow and Ching-Hon Pui	15	Nuclear translocation of lymphoblast glucocorticoid receptors in childhood leukemia does not predict steroid responsiveness
Jorma Isola, Markku Pelto-Huikko, Timo Ylikomi and Pentti Tuohimaa	19	Immunoelectron microscopic localization of progesterone receptor in the chick oviduct
Sherry A. Marts, George M. Padilla and Vladimir Petrow	25	Aromatase activity in microsomes from rat ventral prostate and Dunning R3327H rat prostatic adenocarcinoma
Åke Pousette, Per Björk and Kjell Carlström	31	Hormonal regulation of an estramustine-binding protein in the submaxillary gland of the rat
Avraham Geier, Rachel Beery, Michal Haimsohn and Bruno Lunenfeld	35	Analysis of the nuclear estrogen receptor from MCF-7 cells by limited proteolysis
D. Riley, G. J. Heisermann, R. MacPherson and I. P. Callard	41	Hepatic estrogen receptor in the turtle, *Chrysemys picta*: partial characterization, seasonal changes and pituitary dependence
Giovanni Gatti, Rossana Cavallo, Maria Luisa Sartori, Daniela del Ponte, Rosa Masera, Alessandro Salvadori, Renato Carignola and Alberto Angeli	49	Inhibition by cortisol of human natural killer (NK) cell activity
Clark W. Distelhorst, Laurie Kullman and Jon Wasson	59	Characterization of glucocorticoid receptors in S49 mouse lymphoma cells by affinity labeling with [^{3}H]dexamethasone 21-mesylate
Névéna Christeff, Marie-Claude Auclair, Claudine Benassayag, Alain Carli and Emmanuel A. Nunez	67	Endotoxin-induced changes in sex steroid hormone levels in male rats
Miho Ohta, Shigeru Fujii, Akira Wada, Taira Ohnishi, Toshio Yamano and Mitsuhiro Okamoto	73	Production of 19-hydroxy-11-deoxycorticosterone and 19-oxo-11-deoxycorticosterone from 11-deoxycorticosterone by cytochrome P-450$_{11\beta}$
Lee H.-K. Sun and Fred R. Frankel	83	Interactions between glucocorticoid receptor-bearing chromatin and anti-receptor antibody preparations
V. Papadopoulos, P. Kamtchouing, M. A. Drosdowsky and S. Carreau	93	Effects of the transmethylation inhibitor *S*-adenosyl-homocysteine and of the methyl donor *S*-adenosyl-methionine on rat Leydig cell function *in vitro*
A. D. Tait, L. C. Hodge and K. B. Eik-Nes	99	Steroid hormone biosynthesis by a sesterterpene pathway in the rat and rabbit testis
Celso E. Gomez-Sanchez, Mark F. Foecking, Cedric H. L. Shackleton, Manuel R. Chavarri and Elise P. Gomez-Sanchez	105	18-Hydroxy-11-deoxycortisol: a new steroid isolated from incubations of the adrenal with 11-deoxycortisol
K. Suhara, K. Fujii, T. Tani and M. Katagiri	113	A sensitive method for quantitation of steroid hydroxylase activities of individual P-450 in tissue homogenates

Judith S. Mondschein, James M. Hammond and Judith Weisz 121 Characteristics of estrogen-2/4-hydroxylase of porcine ovarian follicles: influence of steroidal and non-steroidal agents on the activity of the enzyme *in vitro*

F. Celotti, R. C. Melcangi, P. Negri-Cesi, M. Ballabio and L. Martini 125 Differential distribution of the 5-α-reductase in the central nervous system of the rat and the mouse: are the white matter structures of the brain target tissue for testosterone action?

Ying-Hui H. Hsiang, Gary D. Berkovitz, Terry R. Brown, Claude J. Migeon and Angela M. H. Brodie 131 The influence of 4-hydroxy-4-androstene-3,17-dione on androgen metabolism and action in cultured human foreskin fibroblasts

Mitsuteru Numazawa and Yoshio Osawa 137 Equilin and equilenin biosynthesis. Stereochemistry of aromatization of 3-hydroxy-3,5,7-androstatrien-17-one by horse placenta

Bernard Gueux, Jean Fiet, Hervé Galons, Rémi Boneté, Jean-Marie Villette, Patrick Vexiau, Marie-Thérèse Pham-Huu-Trung, Marie-Charles Raux-Eurin, Micheline Gourmelen, Jean-Louis Brérault, René Julien and Claude Dreux 145 The measurement of 11β-hydroxy-4-pregnene-3,20-dione (21-deoxycorticosterone) by radioimmunoassay in human plasma

D. L. Jones and V. H. T. James 151 Determination of dehydroepiandrosterone and dehydroepiandrosterone sulphate in blood and tissue. Studies of normal women and women with breast or endometrial cancer

Jerzy Klimek, Julian Świerczyński and Leon Żelewski 161 Inhibition by hydroxymalonate of malate dependent biosynthesis of progesterone in the mitochondrial fraction of human term placenta

Short Communications

M. J. Sauer and B. A. Morris 165 A simple procedure for enzyme labelling of progesterone derivatives: application of active esters formed using *N,N'*-disuccinimidyl carbonate

G. Messeri, M. Quercioli, G. Cardona, L. Cataliotti, V. Distante and M. Serio 169 Polyamine modification in human breast tumors after short treatment with tamoxifen

Editorial Announcement I

Forthcoming Papers II

FEBRUARY

Allan Munck and Nikki J. Holbrook 173 Steroid hormone antagonism and a cyclic model of receptor kinetics

Patricia P. Scheible, Theresa M. DeLorenzo and John A. Cidlowski 181 Analysis of the glucocorticoid antagonist action of dexamethasone 21-mesylate in HeLa S_3 cells

Katherine P. Henrikson, Elena E. Jazin and Herbert W. Dickerman 189 Separation and identification of two components of an estrogen-responsive, calcium-dependent arginine esteropeptidase

Jean-Luc Coolens, Hugo Van Baelen and Walter Heyns 197 Clinical use of unbound plasma cortisol as calculated from total cortisol and corticosteroid-binding globulin

Gastone G. Nussdorfer and Giuseppina Mazzocchi 203 Vasoactive intestinal peptide (VIP) stimulates aldosterone secretion by rat adrenal glands *in vivo*

Marianne Land and Stanley Ulick 207 Identification of a mineralocorticoid receptor binding substance in the urine of patients with congenital adrenal hyperplasia

Rong-Bao Lu, Emanuel Lebenthal and Ping-Cheung Lee 213 Developmental changes of glucocorticoid receptors in the rat pancreas

M. T. P. Lopes, M. H. Liberato, A. Widman and M. M. Brentani 219 Occupied and unoccupied type II estrogen binding sites in human breast cancer

Donald R. Koritnik and Keith B. Marschke	227	Contraceptive steroid treatment affects steroid binding proteins and the percentage of free 17β-estradiol and testosterone in the cynomolgus monkey (*Macaca fascicularis*)
J. van Eldere, G. Parmentier, J. Robben and H. Eyssen	235	Influence of an estrone-desulfating intestinal flora on the enterohepatic circulation of estrone-sulfate in rats
K. Nahoul, L. Dehennin and R. Scholler	241	Radioimmunoassay of plasma progesterone after oral administration of micronized progesterone
K. Nahoul and R. Scholler	251	Comparison of saliva and plasma 17-hydroxyprogesterone time-course response to hCG administration in normal men
Leland L. Smith, N. M. Made Gowda and Jon I. Teng	259	Sterol hydroperoxide metabolism by *Salmonella typhimurium*
J. D. Few, R. J. Unwin, D. J. S. Carmichael and V. H. T. James	265	Diurnal fluctuation in saliva aldosterone concentration
D. M. D. Perera, H. H. G. McGarrigle, D. M. Lawrence and M. Lucas	273	Amniotic fluid testosterone and testosterone glucuronide levels in the determination of foetal sex
Oskari Heikinheimo, Kimmo Kontula, Horacio Croxatto, Irving Spitz, Tapani Luukkainen and Pekka Lähteenmäki	279	Plasma concentrations and receptor binding of RU 486 and its metabolites in humans
S. C. Brooks, M. G. Battelli and J. D. Corombos	285	Endocrine steroid sulfotransferases: porcine endometrial estrogen sulfotransferase
J. Kolanowski, N. Ortega and J. Crabbé	291	Chronic treatment with corticotropin increases the capacity of rabbit adrenocortical cells to convert pregnenolone into androgens
Short Communication		
M. A. Shaw and D. L. Peacock	297	Plasma binding of oestradiol in progesterone-treated rats
Book Reviews	301	
Forthcoming Papers	i	
Announcements	ii	

MARCH

G. E. Bunce and Mahmood Vessal	303	Effect of zinc and/or pyridoxine deficiency upon oestrogen retention and oestrogen receptor distribution in the rat uterus
M. H. Pourgholami, P. J. Nicholls, H. J. Smith, M. J. Daly and J. Dyas	309	Inhibition of aromatase activity in the rat by aminoglutethimide and related compounds
Gabriella Pridjian, Valerie Schmit and James Schreiber	313	Medroxyprogesterone acetate: receptor binding and correlated effects on steroidogenesis in rat granulosa cells
Sandra J. Bertics, Paul J. Bertics, Janet L. Clarke and Harry J. Karavolas	321	Distribution and ovarian control of progestin-metabolizing enzymes in various rat hypothalamic regions
Thomas J. Schmidt and Craig J. Davidson	329	The antiglucocorticoid, cortexolone, fails to promote *in vitro* activation of cytoplasmic glucocorticoid receptors from the human leukemic cell line CEM-C7
L. Dehennin, K. Nahoul and P. Scholler	337	Steroid 21-hydroxylation by human preovulatory follicles from stimulated cycles: a mass spectrometrical study of deoxycorticosterone, 21-hydroxypregnenolone and 11-deoxycortisol in follicular fluid
J. Tamm, U. Volkwein, E. Kurniawan and H. Becker	345	Concentrations of unconjugated 5α-androstane-3α,17β-diol and 5α-androstane-3β,17β-diol and their precursor in human testicular tissue. Comparison with testosterone, 5α-dihydrotestosterone, estradiol-17β, and with steroid concentrations in human epididymis

Robert W. Hudson 349 Comparison of nuclear 5α-reductase activities in the stromal and epithelial fractions of human prostatic tissue

J. Howard Pratt, Deborah A. Turner and James A. McAteer 355 Aldosterone production after short-term culture of rat adrenal capsule: responsiveness to angiotensin II, potassium and ACTH

Gerard M. Cooke and Bernard Robaire 361 The mechanism of rat epididymal 4-ene steroid 5α-reductase

Magnus Axelson 369 The cholecalciferol sulphate system in mammals

B. A. El-Gamal, J. Landon, R. A. Abuknesha, G. Gallacher and L. A. Perry 375 The production and characterisation of antisera to 17-hydroxyprogesterone

Mohammad Salman, Andrew A. Ruiz, Philip L. Stotter and Gary C. Chamness 383 A progesterone receptor affinity chromatography reagent: 17α-hexynyl nortestosterone Sepharose

R. Kühnel, J. de Graaff, B. R. Rao and J. G. Stolk 393 Androgen receptor predominance in human ovarian carcinoma

L. Dehennin, M. Jondet and R. Scholler 399 Androgen and 19-norsteroid profiles in human preovulatory follicles from stimulated cycles: an isotope dilution–mass spectrometric study

Martin Seidl and Karl-Martin Pirke 407 Testosterone metabolism in the medial basal hypothalamus of the starved male rat

Short Communication
R. Hobkirk, Janet M. Fletcher and H. Y. Choi 413 Estrone sulfate sulfohydrolase in the developing brain and pituitary of rat, mouse and guinea pig

Forthcoming Papers i

Announcements ii

APRIL

Thomas Hermann, Karin Schramm and Rüdiger Ghraf 417 Photoaffinity labeling with [^{3}H]RU 28362: a powerful tool for the study of rat brain glucocorticoid receptors

Philippe Durand, Anne-Marie Cathiard, Elisabeth Naaman, Véronique Brieu and José M. Saez 425 The influence of plasma lipoproteins on steroidogenesis of cultured ovine fetal and neonatal adrenal cells

James H. Clark, William C. Mitchell and Sylvia C. Guthrie 433 Triphenylethylene antiestrogen binding sites (TABS) specificity

Åke Pousette, Roland Fernstad, Holger Sköldefors, Nils-Olof Theve and Kjell Carlström 439 Analysis of an estrogen binding macromolecule in human pancreas by radioimmunoassay

Keith B. Marschke and Donald R. Koritnik 443 Estrogen and androgen receptors in the liver of cynomolgus monkeys (*Macaca fascicularis*)

James D. Shull, Jane H. Walent and Jack Gorski 451 Estradiol stimulates prolactin gene transcription in primary cultures of rat anterior pituitary cells

Helena Lenasi, Tamara Hudnik-Plevnik, Stelio Rakar and Srečko Rainer 457 Distribution of progesterone receptors between the cytosol and nuclear fraction in normal and neoplastic human endometrium

Philip J. Weatherill and Philip A. Bell 463 Identification of two forms of molybdate-stabilized, non-transformed glucocorticoid hormone–receptor complex by gel filtration chromatography

R. C. Bonney and S. Franks 467 Modulation of phospholipase A2 activity in human endometrium and amniotic membrane by steroid hormones

Thavan Padayachi, Rosemary J. Pegoraro, Justus Hofmeyr, Septimus M. Joubert and Robert J. Norman 473 Decreased concentrations and affinities of oestrogen and progesterone receptors of intrauterine tissue in human pregnancy

Britt-Louise Sahlberg	481	The characterization of sulphated metabolites of norethindrone in human milk after oral administration of contraceptive steroids
Ludwik K. Malendowicz, Magdalena Nowak, Janusz Paluszak and Teresa Torlińska	487	Adrenocortical function in 4-APP treated rats: a coupled stereological and biochemical study
H. Vanderstichele, W. Eechaute, E. Lacroix and I. Leusen	493	The effects of neonatal androgenization of male rats on testosterone metabolism by the hypothalamus–pituitary–gonadal axis
Katja Breskvar, Bronislava Črešnar and Tamara Hudnik-Plevnik	499	Resolution and reconstitution of cytochrome P-450 containing steroid hydroxylation system of *Rhizopus nigricans*
R. W. Owen, M. Dodo, M. H. Thompson and M. J. Hill	503	Faecal steroid loss in healthy subjects during short-term treatment with ursodeoxycholic acid
Åke Pousette, Per Björk, Björn Forsgren and Kjell Carlström	509	Mouse monoclonal antibodies against rat estramustine binding protein
Forthcoming Papers	i	
Announcement	ii	

MAY

Ewa J. Rajpert, Frederic P. Lemaigre, Pierre H. Eliard, Martine Place, Dominique A. Lafontaine, Ioannis V. Economidis, Alexandra Belayew, Joseph A. Martial and Guy G. Rousseau	513	Glucocorticoid receptors bound to the antagonist RU486 are not down-regulated despite their capacity to interact *in vitro* with defined gene regions
Serge Belisle, Diego Bellabarba and Jean-Guy Lehoux	521	Enhanced inhibition of estrogen receptor nuclear binding in the uterus of aged mice
Patrick Englebienne, Pierre Van Hoorde and Rika Verheyden	527	Dimerization of SHBG by gelatin and dithiothreitol. Implications for the measurement of SHBG binding capacity in human serum
J. O. Macaulay and G. L. Warne	535	A system for the partial purification of the human androgen receptor following reversible denaturation
Jacques Simard and Fernand Labrie	539	Adrenal C_{19}-5-ene steroids induce full estrogenic responses in rat pituitary gonadotrophs
C. Murphy, T. Fotsis, P. Pantzar, H. Adlercreutz and F. Martin	547	Analysis of tamoxifen and its metabolites in human plasma by gas chromatography–mass spectrometry (GC–MS) using selected ion monitoring (SIM)
R. Södergård and T. Bäckström	557	Sex-hormone-binding globulin and albumin concentrations in human cerebrospinal fluid
Leon Milewich, Valsala Kaimal and Alice R. Johnson	561	Steroid 5α-reductase activity in endothelial cells from human umbilical cord vessels
Kandan Sethumadhavan and Ian R. Senciall	569	Multiplicity of progesterone 21-hydroxylase activities associated with constitutive forms of rabbit liver cytochrome P-450
V. Dhar, R. Stark, I. Kraulis and B. E. P. Murphy	577	Contrasting effects of 5α- and 5β-pregnane-3,20-dione on the motor activity of ovariectomized rats
G. M. Cooke and B. Robaire	581	Differential effects of combinations of phospholipase A_2 and phospholipase C on the activity of rat epididymal nuclear and microsomal 4-ene steroid 5α-reductase
Martin Bohl, Gerd Schubert, Michael Koch, Günter Reck, Joachim Strecke, Manfred Wunderwald, Richard Prousa and Kurt Ponsold	589	Quantitative structure–activity relationships of estrogenic steroids substituted at C14, C15

C. Millot, L. C. Ramirez, B. Jannin, J. Doumas and B. F. Maume	599	Biosynthesis of (20S)-20α-reduced steroids simultaneously with corticosteroids in primary cultures of newborn rat adrenocortical cells stimulated by ACTH
Britt-Louise Sahlberg, Britt-Marie Landgren and Magnus Axelson	609	Metabolic profiles of endogenous and ethynyl steroids in plasma and urine from women during administration of oral contraceptives
R. K. Tcholakian, A. Steinberger and S. N. Newaz	619	Identification of a new Sertoli cell metabolite of testosterone: 5α-androstane-3α,16α,17β-triol, by HPLC and GC–MS
Afzal Z. Mehdi, John A. DiBattista and Thomas Sandor	627	Characterization of steroid receptors in the gut and kidney of the frog (*Rana catesbeiana*) and in the gut of the turtle (*Chrysemys picta*)
Forthcoming Papers	i	
Announcement	ii	

JUNE

E. J. Wickings, M. C. Middleton and S. G. Hillier	641	Non-steroidal inhibition of granulosa cell aromatase activity *in vitro*
You H. Xu, Rong S. Luo and Tung Y. Wang	647	Preferential binding of androgen to transcriptionally active chromatin in rat prostate
Cheryl E. Reker, Margot C. LaPointe, Branka Kovačič-Milivojević, William J. H. Chiou and Wayne V. Vedeckis	653	A possible role for dephosphorylation in glucocorticoid receptor transformation
Bernard Ayton and Finian Martin	667	Conjugated forms of [^{3}H]1α,25-dihydroxyvitamin D_3 in rat bile
G. H. Degen, J. A. McLachlan, T. E. Eling and K. Sivarajah	679	Cooxidation of steroidal and non-steroidal estrogens by purified prostaglandin synthase results in a stimulation of prostaglandin formation
Joseph Katz, Thomas H. Finlay, Sila Banerjee and Mortimer Levitz	687	An estrogen-dependent esterase activity in MCF-7 cells
M. Lauber, S. Sugano, T. Ohnishi, M. Okamoto and J. Müller	693	Aldosterone biosynthesis and cytochrome P-$450_{11\beta}$: evidence for two different forms of the enzyme in rats
H. Hata, C. F. Holinka, S. L. Pahuja, R. B. Hochberg, H. Kuramoto and E. Gurpide	699	Estradiol metabolism in Ishikawa endometrial cancer cells
Miyoko Hayashida, Naoki Terakawa, Ikuya Shimizu, Hiromasa Ikegami, Hiroshi Wakimoto, Toshihiro Aono, Osamu Tanizawa and Keishi Matsumoto	705	Roles of antiestrogen binding sites in human endometrial cancer cells
D. W. Davidson, R. O'Carroll and J. Bancroft	713	Increasing circulating androgens with oral testosterone undecanoate in eugonadal men
V. Cameron, E. A. Espiner, M. G. Nicholls and S. Parratt	717	Effect of metoclopramide on adrenal secretion in sheep: influence of dexamethasone and sodium intake
John A. Copland, Elizabeth J. Smanik and Thomas G. Muldoon	723	Discrete early changes in cellular subpopulations of rat uterine and anterior pituitary estrogen receptors in response to acute exposure to exogenous estradiol
Amor el Abed, Bernard Kerdelhue, Michel Castanier and Robert Scholler	733	Stimulation of estradiol-17β secretion by 7,12-dimethylbenz(a)anthracene during mammary tumor induction in Sprague–Dawley rats
Yutaka Kaburagi, Michael B. Marino, Rashad Y. Kirdani, Joseph P. Greco, James P. Karr and Avery A. Sandberg	739	The possibility of aromatization of androgen in human prostate
Forthcoming Papers	i	
Announcement	ii	